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On page 22, line 36, delete "current" and insert -- currents--.

On page 23, line 12, delete the word "laser".

On page 32, line 31, insert --return-- before the word "electrode".

IN THE CLAIMS:

Please cancel claims 1-22, 29, 30, 33, 36-38, and 57. Please amend claims 23-28, 31, 32, 34, 35, 39-56, 58 and 59 as follows. Please add claims 80-105. All claims have been set forth for convenience of reference.

Please cancel claims 1-22.

1 23. (Twice Amended) A method for applying energy to a
 2 target site on a patient body structure comprising:
 3 providing an [active] electrode terminal and a return
 4 electrode electrically coupled to a high frequency voltage
 5 source;
 6 positioning the active electrode in close proximity to
 7 the target site in the presence of an electrically conducting
 8 terminal [liquid]; and
 9 applying a high frequency voltage between the [active]
 10 electrode terminal and the return electrode, the high frequency
 11 voltage being sufficient to vaporize the fluid [liquid] in a thin
 12 layer over at least a portion of the [active] electrode terminal
 13 and to induce the discharge of energy to the target site in
 14 contact with [from] the vapor layer.

1 24. (Twice Amended) The method of claim 23 wherein
 2 the [active] electrode terminal comprises an electrode array
 3 including a plurality of isolated electrode terminals.

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1 ¹³ 25. (Amended) The method of claim 23 wherein [the] at
2 least a portion of the energy induced [from the vapor layer] is
3 in the form of photons having a wavelength in the ultraviolet
4 spectrum.

B2 1 ¹⁴ 26. (Amended) The method of claim 23 wherein at least
2 a portion of the energy [induced from the vapor layer] is in the
3 form of energetic electrons.

1 ³ 27. (Amended) The method of claim 24 wherein the
2 isolated electrode terminals each have a contact surface area in
3 the range of about 0.25 mm² to 50.0 mm² [below 15 mm²].

[1 ~~28. (As Filed) The method of claim 24 wherein the isolated~~
2 ~~electrode terminals have circular contact surfaces with an area in the range~~
3 ~~from 0.01 mm² to 1 mm².~~

Please cancel claims 29 and 30.

B3 1 ⁵ 31. (Amended) The method of claim 24 wherein the
2 electrode terminals are spaced from each other a distance of
3 about 0.0005 to 2.0 [5 to 0.01] mm.

[1 ~~32. (As Filed) The method of claim 24 wherein the electrode~~
2 ~~array is disposed over a distal tip of an electrosurgical probe.~~

Please cancel claim 33.

1 ~~34. (As Filed) The method of claim 24 wherein the electrode~~
2 ~~terminals comprise a material with a relatively low thermal conductivity.~~

1 ~~35. (As Filed) The method of claim 34 wherein the electrode~~
2 ~~materials comprise a material selected from the group consisting of titanium,~~
3 ~~tungsten, platinum, aluminum and tantalum.~~

Please cancel claims 36-38.

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17³⁵. (Amended) The method of claim 23 wherein the high frequency voltage is at least 200 [300] volts peak to peak.

B4 18⁴⁰. (Amended) The method of claim 23 wherein the voltage is in the range from 500 [600] to 1400 volts peak to peak.

BB4 19⁴¹. (Amended) (As Filed) The method of claim 23 wherein the [active] electrode terminal is positioned between 0.02 to 5 mm from the target site.

B5 20⁴². (Amended) The method of claim 23 wherein the vapor layer has a thickness of about 0.02 to 2.0 mm [10 to 400 microns].

B6 21⁴³. (Twice Amended) The method of claim 23 wherein the distance between the most proximal portion of the [active] electrode terminal [surface] and the most distal portion of the return electrode is [surface are spaced apart by a distance] in the range from 0.5 [1] to 10 mm.

[22⁴⁴. (As Filed) The method of claim 24 wherein the return electrode has a distal end positioned proximal to the electrode array.

B7 22⁴⁵. (Twice Amended) The method of claim 23 wherein the [active] electrode terminal [surface] and the return electrode are of comparable size and comprise a bipolar array of isolated electrode terminals which both come in close proximity or in contact with the body structure.

B8 23⁴⁶. (Amended) The method of claim 23 wherein the liquid phase of the electrically conducting fluid [liquid] has a conductivity greater than 2 mS/cm.

24⁴⁷. (Amended) The method of claim 23 wherein the liquid phase of the electrically conductive fluid [liquid] comprises isotonic saline.

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B9

28 ~~27~~ 48. (Twice Amended) A method for applying energy to a target site on a patient body structure comprising:

providing an [active] electrode terminal and a return electrode electrically coupled to a high frequency voltage source;

positioning the [active] electrode terminal in close proximity to the target site in the presence of an electrically conducting fluid [liquid]; and

applying a high frequency voltage between the [active] electrode terminal and the return electrode, the high frequency voltage being sufficient to impart sufficient energy into the target site to ablate [several cell layers of] the body structure without causing substantial tissue necrosis below the surface of the body structure underlying the ablated body structure [beyond the several cell layers].

B¹⁰

29 ~~28~~ 49. (Amended) The method of claim ~~48~~ ^{37 28} wherein the applying step comprises:

vaporizing the electrically conducting fluid [liquid] in a thin layer over at least a portion of the [active] electrode terminal [surface]; and

inducing the discharge of photons to the target site in contact with [from] the vapor layer.

B¹¹

30 ~~29~~ 50. (Amended) The method of claim ~~48~~ ^{28 29} wherein the applying step comprises:

vaporizing the electrically conducting fluid [liquid] in a thin layer over at least a portion of the active electrode surface; and

inducing the discharge of energetic electrons to the target site in contact with [from] the vapor layer.

[

51. (As Filed) The method of claim 48 wherein the depth of necrosis is 0 to 400 microns.

B¹¹

26 ~~25~~ 52. (Twice Amended) A method for applying energy to a target site on a patient body structure comprising:

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B¹¹

3 providing an active electrode and a return electrode
4 electrically coupled to a high frequency voltage source;
5 positioning the [active] electrode terminal in close
6 proximity to the target site in the presence of an electrically
7 conducting fluid [liquid]; and
8 applying a high frequency voltage between the [active]
9 electrode terminal and the return electrode, the high frequency
10 voltage being in the range from 500 [600] to 1400 volts peak to
11 peak.

[

1 53. (As Filed) The method of claim 52 wherein the high
2 frequency voltage is in the range from 700 to 900 volts peak to peak.

B¹²

1 32 ~~54~~ 54. (Twice Amended) A method for applying energy to a
2 target site on a patient body structure comprising:
3 providing an active electrode electrically coupled to a
4 high frequency voltage source;
5 positioning the [active] electrode terminal in close
6 proximity to the target site in the presence of an electrically
7 conducting fluid [liquid]; and
8 generating a voltage gradient between the [active]
9 electrode terminal and tissue at the target site, the voltage
10 gradient being sufficient to create an electric field that cause
11 the breakdown of [breaks down the] tissue through molecular
12 dissociation or disintegration.

32 ~~55~~ 55. (Twice Amended) The method of claim 54 wherein
1 the generating step comprises:
2 providing a return electrode electrically coupled to a
3 high frequency voltage source;
4 applying a high frequency voltage between the [active]
5 electrode terminal and the return electrode; and
6 vaporizing the electrically conducting fluid [liquid]
7 in a thin layer over at least a portion of the [active] electrode
8 terminal [surface].
9

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B13
1 ~~34~~ ³³ 56. (Amended) The method of claim ~~55~~ further
2 comprising developing a film layer of vapor between the active
3 electrode and the body structure [tissue] at the target site.

E
Please cancel claim 57. ✓

B14
1 ~~35~~ ³³ 58. (Amended) The method of claim ~~58~~ further
2 comprising cooling the tissue with the electrically conducting
3 fluid [liquid] to reduce the temperature rise of those portions
4 of the body structure adjacent the target site [shield the tissue
5 from the high frequency voltage].

B14
1 ~~36~~ ³⁵ 59. (Amended) The method of claim ~~58~~ wherein the
2 cooling step includes translating the distal surface [tip] of the
3 electrode terminal [probe] over the target site to allow the
4 electrically conducting fluid [liquid] to contact the tissue
5 after the tissue has been subjected to the electric field [high
6 frequency voltage].

[
Please cancel claims 60-79, as they have been
restricted out.

Please add claims 80-105.

B15
1 -- ~~25~~ ²⁸ 80. (New) The method of claim ~~23~~ wherein the
2 electrode height of the most distal portion of the electrode
3 terminal relative to the most proximal portion of the electrode
4 terminal exposed to the electrically conducting fluid is in the
5 range from 0.0 to 2.0 mm.

B15
1 ✓ ~~37~~ ²⁸ 81. (New) The method of claims ~~23~~ and ~~48~~ wherein the
2 electrode terminal is surrounded and supported by an insulating
3 matrix at or near the distal tip of the probe to electrically
4 isolate the proximal portion of the electrode terminal from the
5 electrically conductive fluid, the insulating matrix comprising
6 an inorganic material.

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38 ~~22~~ 37
 82. (New) The method of claim ~~81~~ wherein the inorganic material is selected from the group consisting essentially of ceramic, glass and glass/ceramic compositions.

10
 83. (New) The method of claim ~~24~~ wherein the electrode height of the most distal portion of any of the electrode terminals relative to the most proximal portion of said electrode terminals exposed to the electrically conducting fluid is in the range from 0.0 to 2.0 mm.

18 2
 84. (New) The method of claim ~~24~~ wherein the electrode terminals are surrounded and supported by an insulating matrix at or near the distal tip of the probe to electrically isolate proximal portions of the electrode terminals from the electrically conductive fluid, the insulating matrix comprising an inorganic material.

12 11
 85. (New) The method of claim ~~84~~ wherein the inorganic material is selected from the group consisting essentially of ceramic, glass and glass/ceramic compositions.

39 ~~28~~ 37
 86. (New) The method of claim ~~81~~ wherein the distal surface of the electrode terminal is recessed below the surface of the insulating matrix by a distance from 0.01 mm to 1.0 mm.

40 ~~28~~ 37
 87. (New) The method of claim ~~81~~ wherein the distal surface of the electrode terminal is flush with the surface of the insulating matrix.

41 ~~28~~ 37 52
 88. (New) The method of claims ~~48~~ and ~~54~~ wherein the electrode terminal comprises an electrode array including a plurality of isolated electrode terminals.

42 ~~41~~ 41
 89. (New) The method of claim ~~88~~ wherein the generating step comprises:
 providing a return electrode electrically coupled to a higher frequency voltage source;

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5 applying a high frequency voltage between the return
6 electrode and the array of electrode terminals; and
7 vaporizing the electrically conducting fluid in a thin
8 layer over one or more of the electrode terminals of the array.

1 ⁴³ 90. (New) The method of claim ⁴¹ 89 further comprising
2 developing a film layer of vapor between one or more of the
3 electrode terminals and the target site.

1 ⁴⁴ 91. (New) The method of claim ⁴⁰ 89 further comprising
2 cooling the tissue with the electrically conducting fluid to
3 reduce the temperature rise of those portions of the body
4 structure adjacent the target site.

1 ¹⁵ 92. (New) The method of claim ¹⁴ 26 wherein the energy
2 of the energetic electrons is sufficient to cause disassociation
3 or disintegration of molecules of the body structure.

1 ¹⁶ 93. (New) The method of claim ¹⁴ 26 wherein the energy
2 evolved by the energetic electrons is greater than 3eV.

1 ✓ ⁴⁵ 94. (New) The method of claims ¹ 23 and ²³ 55 wherein the
2 density of the vapor layer is less than about 10^{20} atoms/cm³.

1 ✓ ⁴⁶ 95. (New) The method of claims ¹ 23 and ³⁰ 50 wherein the
2 electrode terminal is configured to promote bubble nucleation
3 causing the formation of the vapor layer.

1 ✓ ⁴⁷ 96. (New) The method of claims ¹ 23 and ³⁷ 48 wherein the
2 electrode terminal has a contact surface area in the range of
3 about 0.25 mm² to 50 mm².

1 ✓ ⁴⁸ 97. (New) The method of claims ²⁰ 23 and ⁵⁰ 52 wherein the
2 high frequency voltage is at least 200 volts peak to peak.

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✓ ⁴⁹ 98. (New) The method of claims ²⁸ 48 and ²⁶ 52 wherein the high frequency voltage is in the range from about 500 to 1400 volts peak to peak.

✓ ⁵⁰ 99. (New) The method of claims ²⁸ 48 and ²⁶ 52 wherein the electrode terminal is positioned between 0.02 to 2.0 mm from the target site.

✓ ⁵¹ 100. (New) The method of claims ²⁸ 48 and ²⁶ 52 wherein the electrode terminal and the return electrodes comprise a bipolar array of isolated electrode terminals.

✓ ⁵² 101. (New) The method of claims ¹ 23 and ²⁸ 48 further comprising cooling the tissue with the electrically conducting fluid to reduce the temperature rise of those portions of the body structure adjacent the target site.

✓ ⁵³ 102. (New) The method of claim ⁵² 101 wherein the cooling step includes translating the distal surface of the active electrode over the target site to allow the electrically conducting fluid to contact the tissue after the tissue has been subjected to the electric field.

✓ ⁵⁴ 103. (New) The method of claims ¹ 23 and ²⁸ 48 further comprising evacuating fluid generated at the target site with a suction lumen having a distal end adjacent the electrode terminal.

✓ ⁵⁵ 104. (New) The method of claims ¹ 23 and ²⁸ 48 wherein the target site is a tumor within or on the patient's body.

✓ ⁵⁶ 105. (New) The method of claims ²⁸ 48 and ²⁶ 52 wherein the electrode terminal comprises an electrode array including a plurality of isolated electrode terminals.--